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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,336	07/18/2003	Patrick W. Truitt	99-15 D1	3290
90031 7590 06/29/2009 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001			EXAMINER	
			DIXON, ANNETTE FREDRICKA	
BRIARCLIFF MANOR, NY 10510			ART UNIT	PAPER NUMBER
			3771	
			MAIL DATE	DELIVERY MODE
			06/29/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/623,336	TRUITT ET AL.				
Office Action Summary	Examiner	Art Unit				
	Annette F. Dixon	3771				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 12 Ma	av 2008					
	action is non-final.					
·=		secution as to the merits is				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
ologod in addordance with the practice and c	x parte gaayle, 1000 G.B. 11, 10	0.0.210.				
Disposition of Claims						
<ul> <li>4) ☐ Claim(s) 1-15,24 and 31-33 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1-15, 24, and 31-33 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ acce	epted or b) $\square$ objected to by the E	Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction	on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Exa	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some color None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	ite				

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## **DETAILED ACTION**

1. This Office Action is in response to the amendment filed on May 12, 2008. Examiner acknowledges claims 1-15, 24, and 31-33 are pending in this application with claims 16-23 and 25-30 having been cancelled.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-5, 7-15, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruiz-Vela et al. (4,602,653) in view of Sheets (5,152,661).

As to Claims 1-4 and 7, Ruiz-Vela discloses a radial impeller, comprising: a hub (the center portion connecting the blade, 92 to the shaft 38) attachable to a rotating shaft (38); an impeller body (92) attached to the hub (the center portion connecting the blade, 92 to the shaft 38) and extending radially from the hub (the center portion connecting the blade, 92 to the shaft 38) to a perimeter of the impeller (92) and having opposite radial faces (Column 9, Lines 22-35). Yet Ruiz-Vela does not expressly disclose the use of a plurality of impeller blades and the particular construction of the blades. Sheets teaches the use of multiple impeller blades over a single impeller blade in aerosol generators for the purpose of providing greater flow diffusion. (Column 42, Lines 53-57). Further, Sheets teaches the multiple impeller blades are oriented around

the central hub in a circumferential orientation, with leading and trailing edges of the blade. (Column 42, Lines 40-53). Therefore, it would have been obvious to one having ordinary skill in the art to duplicate the impeller of Ruiz-Vela, as taught by Sheets in order to provide greater control of the flow of gases from the aerosol generator.

As to Claims 5 and 12, the system of Ruiz-Vela as modified by Sheets teaches the hub, yet does not expressly disclose the shape of the hub have a smooth outer surface curving radially outward. However, it would have been an obvious matter of design choice to make the different portions of the hub of whatever form or shape was desired or expedient. A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47.

As to Claims 8-11 and 15, please see the rejection of claim 1. The difference between claim 8 and claim 1 is the incorporation a housing having a gas inlet and a gas outlet limitation. Ruiz-Vela discloses a housing (70) having inlets (72 and 74) and a gas outlet (76).

As to Claim 13, Ruiz-Vela discloses the housing outlet (76) increases in cross section outwardly toward the accumulator (30). (Figures 1 and 2).

As to Claim 14, Ruiz-Vela discloses the housing having a similar height to the blade. (Figure 2).

As to Claims 24, please see the rejection of claim 8. The difference between claim 24 and claim 8 is the incorporation source of gas and the delivering of the pressurized gas to an external location using a conduit. Ruiz-Vela discloses sources of

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gas (Column 5, Lines 41-48) and discloses the delivery of the gas to a patient for ventilation (Column 1, Lines 13-24).

4. Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Ruiz-Vela et al. (4,602,653) in view of Sheets (5,152,661), as applied to claim 1 and further in view of Harmsen (5,695,318).

As to Claim 6, the system of Ruiz-Vela as modified by Sheets teaches the radial impeller; yet does not expressly disclose the impeller is constructed from one piece by injection molding. Harmsen teaches the construction of a fan using one-piece injection molding because of its ease in the manufacture process. (Column 2, Lines 17-34). Therefore, it would have been obvious to one having ordinary skill in the art to modify the method of construction of the radial impeller, as taught by Harmsen to produce a fan that can be easily manufactured.

5. Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruiz-Vela et al. (4,602,653) in view of Sheets (5,152,661) and Rapoport (5,065,756).

As to Claims 31-33, please see the rejection of claim 24. The difference between claim 31 and claim 24 is the incorporation of specific operational flow and pressure characteristics. The system of Ruiz-Vela as modified by Sheets does not teach the specific operational flow and pressure characteristics. Yet, Rapoport teaches the operational flow and pressure characteristics, specifically 5-15 centimeters of water pressure range, and 30-50 liters per minute flow range for the purpose of providing

positive pressure ventilation. (Column 4, Lines 12-22). Therefore, it would have been obvious to one having ordinary skill in the art to supply gas to a patient at the recited operational characteristics as taught by Rapoport to enable proper ventilation during respiratory treatment.

## Response to Arguments

6. Applicant's arguments with respect to claim 1-15, 24, and 31-33 have been considered but are most in view of the new ground(s) of rejection.

## Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sheets (4,981,414) and Dobrzynski (5,066,195) disclose additional radial impeller devices for generating pressure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette F. Dixon whose telephone number is (571) 272-3392. The examiner can normally be reached on Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Annette F Dixon Examiner Art Unit 3771

/Annette F Dixon/ Examiner, Art Unit 3771

/Justine R Yu/ Supervisory Patent Examiner, Art Unit 3771